



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/987,464	11/14/2001	Yasushige Nakamura	011523	6989
38834	7590	12/29/2004	EXAMINER	
WESTERMAN, HATTORI, DANIELS & ADRIAN, LLP			RODEE, CHRISTOPHER D	
1250 CONNECTICUT AVENUE, NW			ART UNIT	
SUITE 700			PAPER NUMBER	
WASHINGTON, DC 20036			1756	

DATE MAILED: 12/29/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/987,464

Applicant(s)

NAKAMURA ET AL.

Examiner

Christopher RoDee

Art Unit

1756

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 December 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) 6-9 and 19-22 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3, 10-13, and 16-18 is/are rejected.
- 7) ☒ Claim(s) 4, 5, 14 and 15 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____

DETAILED ACTION

Information Disclosure Statement

The IDS filed 22 October 2004 has not been considered because the individual signing has not provided evidence showing that the individual is a registered patent attorney or agent or has been granted limited recognition to practice. The individual cannot present submissions under representative capacity per 37 CFR 1.34a. The IDS will remain in the file but has not been considered.

Claim Rejections - 35 USC § 102 & 103

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 10-13, 16, and 18 are rejected under 35 U.S.C. 102(a) as being anticipated by WO 99/23534 considered with Nakanishi *et al.* in US Patent 6,326,115.

Claims 1-3, 10-13, and 16-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over WO 99/23534 considered with Nakanishi *et al.* in US Patent 6,326,115, in view of Gruber *et al.* in US Patent 4,578,338, still further in view of Tomono *et al.* in US Patent 4,997,739.

Nakanishi is the US national stage patent of the WO document. As discussed in the prior Office actions, the content of the WO document and Nakanishi are believed to be identical because of this relationship. Applicant did not disagree with the Examiner's position. Consequently, the WO document and Nakanishi are taken as having identical disclosure.

This rejection was set forth in the prior Office actions. Applicants have amended the independent claims to state the polyester resin is formed by polymerizing terephthalic acid,

Art Unit: 1756

isophthalic acid, or a mixture thereof as an acid components an ethylene or propylene adduct of bisphenol A as an alcohol component and trimellitic acid as a crosslinking agent component. Applicants traverse the rejection based on this amendment because the WO document requires a urethane or urea bond, which is not produced by the now-recited reactants. Further, the presence of the urea or urethane bond would not permit a toner to be used in a flash fixing system because the urethane bond would decompose at the flash fixing temperature.

The Examiner has carefully reviewed applicants' remarks in light of the claim amendments and has reevaluated the applied art. The WO document, as seen in the corresponding US Patent to Nakanishi, discloses polyester (i-a) as being formed from condensation of a polyol (1) and a polycarboxylic acid (2) (col. 3, l. 40-45). Specifically useful polyols include diols (1-1) and polyols (1-2) having three or more valences (col. 3, l. 54-57). Useful polycarboxylic acids include dicarboxylic acids (2-1) and polycarboxylic acids (2-2) (col. 4, l. 26-31). Specifically disclose diols include ethylene oxide and propylene oxide addition product of bisphenols (col. 4, l. 8-9). Specifically discloses dicarboxylic acids include isophthalic and terephthalic acids (col. 4, l. 37-38) while a polycarboxylic acid is preferably trimellitic acid (col. 4, l. 44). Example I-4 reacts 669 parts of an ethylene oxide (2 mols) addition product of bisphenol A, 274 parts of isophthalic acid and 20 parts of trimellitic acid anhydride under condensation-polymerization and the polymerized product was reacted with 154 parts of isophorone diisocyanate in the same manner as in Example I-3 to obtain a hydroxyl group-containing prepolymer α_2 (col. 25). Example II-4 produces a prepolymer from the same reactants (col. 28). Example II-1 discloses formation of the binder resin from a polyester prepolymer and pentaerythritol tetrabehenate. This prepolymer is further reacted to give the modified polyester, which forms a component of the polyester binder. The binder resin still contains the polyester formed from the requisite reactants.

Art Unit: 1756

Each of the required polyester reactants of the amended claims is present and exemplified in the WO document for the section 102 rejection. Further, selection of preferred binder resin reactants from the WO document's disclosure would have been obvious to the skilled artisan because the reference requires alcohols and acid reactants to form the modified polyester and the WO document discloses specific reactants that meet these requirements. The reference provides ample guidance to arrive at the claimed invention for the section 103 rejection.

Applicants' remarks have been carefully considered, as noted above. The flash fixing characteristic of the claimed toner is an intended use of this material. The claims are directed to the product and not the manner in which it is used (i.e., no process claims are currently under consideration). Because flash fixing is an intended use limitation on the toner it does not impart any specific compositional or structural limitation on the toner. The WO document discloses each of the requisite components of the claimed toner. The rejection is still seen as proper and is maintained.

The previously applied rejection over Gambayashi is withdrawn based on perfection of applicants' perfected section 120 priority claim.

Allowable Subject Matter

Claims 4, 5, 14, and 15 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher RoDee whose telephone number is 571-272-1388. The examiner can normally be reached on most weekdays from 6:00 to 4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Huff can be reached on 571-272-1385. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 1756

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

cdr
23 December 2004


CHRISTOPHER RODEE
PRIMARY EXAMINER